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Two business groups bid for \$1 billion cleanup contract at Idaho National Laboratory

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Two teams have submitted bids on a more-than-\$1 billion radioactive waste cleanup contract for the Idaho National Laboratory site, though details remain sparse on which companies make up those teams.

One bid team is led by Fluor, the other by AECOM. Both are Fortune 500 companies and are regular players in large-scale construction and cleanup projects around the world.

Fluor and AECOM representatives met with local government and economic officials in recent weeks to discuss the contract, but have not announced their bid proposals publicly. U.S. Department of Energy officials also have declined to release information about which teams, or even how many, are in the running.

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Credentials

Irving, Texas-based Fluor has worked on everything from highway to solar projects and managed DOE operations at the Hanford site in Washington, and the Savannah River site in South Carolina. It opened an office in Idaho Falls last summer.

AECOM, based in Los Angeles, has worked on World Cup stadiums and New York City's new World Trade Center, and is already involved with both current Idaho cleanup contracts and other DOE projects after purchasing rival URS Corp. last year. It maintains an office in the former Morrison Knudsen headquarters in Downtown Boise that was previously occupied by URS and, before that, by Washington Group International.

The Fluor and AECOM names were confirmed by Partnership for Science & Technology CEO Leslie Jones and several other officials with knowledge of the new contract, which is known as Idaho Cleanup Project Core, or ICP Core.

The winning contractor team — both Fluor and AECOM likely have one or two partners — will be tasked with cleanup of toxic and radioactive contamination, watching over spent nuclear fuel and several other duties at DOE's desert site. The length of ICP Core is five years. DOE said it will be worth more than \$1 billion.

The winning contractor team ultimately will take over both of the existing cleanup contracts at the site now held by Idaho Treatment Group and CH2M-WG Idaho.

AECOM is one of the parent companies of Idaho Treatment Group, along with Babcock & Wilcox and EnergySolutions. It also is a parent of CH2M-WG, alongside CH2M Hill. The "WG" stands for Washington Group, the successor to Morrison Knudsen that URS and later AECOM bought.

Fluor does not have a relationship with either contractor.

Mark Dehring, a Fluor executive, confirmed his company is leading one of the teams.

"Since we are now in 'procurement space' I prefer not to share any details regarding our teaming partners or our proposal to DOE," he said in an email.

Keith Wood, a spokesman for AECOM, declined to comment on his company's bid, "since this is a business development opportunity."

Bechtel *not* *in* *mix*

Some said it was possible a third team also was in the running for

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ICP Core, but the existence of such a team appears unlikely.

Several officials said the leader of the third team would have been Bechtel, one of the largest construction and civil engineering companies in the United States. Bechtel showed keen interest in ICP Core when the DOE started the contracting process late last year. The company previously managed waste cleanup at the DOE site, as well as research operations at Idaho National Laboratory.

But Bechtel spokesman Fred DeSousa said his company was not in the mix. "Bechtel did a comprehensive evaluation of the opportunity but in the end did not submit a bid," he said in an email.

As many as four contractor teams initially were interested in ICP Core, according to trade publication Weapons Complex Monitor. But several companies, including Bechtel, dropped out of the running because of what were described as overly strict terms and conditions in DOE's contract, and not enough rewards.

It led to concerns about a lack of competition for the new contract.

"The reason you bid is you want competition," U.S. Rep. Mike Simpson told the Post Register in February. "You want different ideas and different concepts of what it's going to cost. I mean, that's how you drive costs down."

Workers finish sealing storage bunkers at US nuclear dump closed by radiation leak last year
Associated Press
June 2, 2015
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Hundreds of containers of waste have been entombed at the federal government's underground nuclear waste repository in southern New Mexico now that workers have closed off storage areas affected by a radiation leak, officials said Tuesday.

After months of work, crews finished sealing the last of two bunkers at the Waste Isolation Pilot Plant late Friday. The milestone was announced by state Environment Secretary Ryan Flynn as he updated lawmakers gathered in Santa Fe on recovery efforts at the plant, which has been closed since the February 2014 leak.

Flynn described the closure of the area known as Panel 6 and one room within Panel 7 as a major accomplishment.

Inside the two areas were 422 containers packed with radioactive waste similar to the one that ruptured last year and caused the leak. The containers appear stable, but officials say they still include an incompatible mix of nitrate salts and organic cat litter used for absorbing moisture.

"We, along with the Department of Energy, believe that they needed to permanently close these panels as soon as possible in order to prevent against any additional releases," Flynn told the lawmakers.

The state initially set a deadline for completing the work by the start of 2015, but closure of the panels was delayed in part by the investigation into the leak.

Workers used salt mined from another area of the repository, chain link, brattice cloth and steel bulkheads to close off the storage areas. They also installed air monitors.

"This is an unprecedented issue we've had to confront," Flynn said. "There were certainly some problems early on, but I think we're really starting to turn a corner now and we're beginning to see some meaningful progress at the facility itself."

The repository remains closed and federal officials have said it could take years and more than a half-billion dollars to resume full operations.

The Energy Department and the contractor that runs the repository aim to resume limited operations by this time next year, but Flynn told lawmakers he expects it will take longer.

WIPP's closure has delayed cleanup of legacy waste like contaminated gloves, tools and clothing from decades of bomb-making across the federal government's nuclear complex. In its 15 years of operation, the nuclear dump received shipments from more than 20 sites as part of the Energy Department's multibillion-dollar-a-year cleanup program.

Investigators determined the container that ruptured and forced the closure was packed inappropriately at Los Alamos National Laboratory, the birthplace of the atomic bomb.

Flynn said there's no longer any margin of error and the corrective actions called for by the state and federal investigators should prevent another mishap.

Flynn also outlined for lawmakers a \$73.2 million settlement reached last month with the DOE. Nearly half of that will go toward improving transportation routes for hauling waste to the repository.

SRS reaches milestone as filling starts for Tank 16

The Augusta Chronicle
June 2, 2015

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The first trucks delivering a special cement-like grout to fill an

underground nuclear waste storage tank arrived Tuesday at Savannah River Site.

The grouting for tank 16 marks a significant milestone toward removing the tank from use. It was the subject of a dispute regarding closure deadlines between the U.S. Energy Department site and federal and state regulatory agencies.

Tank 16 began storing waste in 1959 when SRS manufactured materials for nuclear weapons. The tank – one of the oldest at the site – previously leaked and was considered a high priority in efforts to close 51 tanks.

Grouting takes about three months, said Dean Campbell, spokesman for liquid-waste contractor Savannah River Remediation. The deadline for closing the tank was Sept. 30, but the site was granted 27 extra days – instead of the 15-month requested – in a settlement reached earlier this year.

Tank 16 closure will be reached at or before the Oct. 27 deadline, Campbell said.

“We’re on schedule. Some of this is weather dependent,” he said.

With a 1 million-gallon storage capacity, tank 16 will be the first tank closed in the site’s H area. Six others were closed in F area, most recently in 2013.

The grout is made by a local vendor, Campbell said.

On Tuesday, about four trucks were delivering grout each hour, but that can increase during peak times, he said.

Waste material was pumped out of the tank prior to grouting. Then the tank was cleaned, isolated from other tanks in the system and inspected for regulatory compliance, according to SRS.

ORNL contractor fined \$112,500 for rad accident
Frank Munger’s Atomic City Underground
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The Aug. 25, 2014 radiation accident that exposed seven workers occurred at this ORNL facility.

The Department of Energy has completed its investigation of a radiation accident last year at Oak Ridge National Laboratory — in which seven workers received internal exposures of highly enriched uranium — and ordered the lab contractor to pay a fine of \$112,500 and take a number of corrective actions.

The findings were delivered in a May 14 letter from Steven Simonson, director of DOE's Office of Enforcement, to ORNL Director Thom Mason. That resulted in a newly released consent order that's been agreed upon by DOE and UT-Battelle, the government's managing contractor at ORNL.

The incident occurred on Aug. 25, 2014 when workers at the Oak Ridge lab were performing a secret project for the Y-12 nuclear weapons plant. The work involved the shipment of highly enriched uranium from Y-12 to ORNL's Building 3525 (the Irradiated Fuels Examination Laboratory), where supervised workers were to reduce the size of the uranium metal alloy items and repackage them.

However, during the operation there was an unexpected airborne release of uranium particles that set off two alarms in the building. Initially, monitors did not indicate that any of the eight workers had been contaminated by the release. But subsequent tests confirmed that seven workers "received an acute occupational inhalation uptake" of highly enriched uranium.

The highest dose among the workers was an estimated 230 millirems, which was about 5 percent of the annual dose limit for nuclear workers, the report stated. It was determined that most of the dose of alpha radiation came from the U-234 isotope of uranium, which is more potent than the U-235 and U-238 isotopes.

UT-Battelle, the government's managing contractor at ORNL, apparently was not fully informed of the composition and physical characteristics of the radioactive materials — in part because of the classified nature of its former use at Y-12.

"Fortunately, no workers were injured, and we thoroughly evaluated the incident to better ensure the safety of ORNL staff going forward," lab spokesman David Keim said Tuesday.

DOE's report citing a number of things that contributed to the airborne release of radioactive material and said it could have been prevented if it had been done in a more protective enclosure. Also, worker doses could have been reduced or eliminated if the hazards had been better understood and respiratory had been used.

DOE credited the ORNL contractor with self-reporting the safety non-compliances and taking swift actions to correct the problems.

"Consequently, the Office of Enforcement has high confidence that UT-Battelle's corrective actions will prevent future recurrence of similar events," DOE's Simonson said in his letter to Mason.

[LINK](#)

China has dozens of nuclear power plants under construction and in the planning stages. India is planning its own massive expansion of nuclear generation capacity. Countries across the Middle East—from Saudi Arabia and the Gulf emirates to Tunisia and Jordan—are seriously considering the creation of nuclear power sectors. And as countries around the world make policy decisions about nuclear technology, they will also be making choices about nuclear fuel cycles and whether to reprocess spent nuclear fuel, separating out uranium and plutonium for reuse. These decisions will have major implications for international security. If the growth of nuclear power is accompanied by increased reprocessing, new stores of plutonium will be created around the world, increasing the chances that terrorists or governments could steal or divert it to make nuclear bombs.

Over the last two years, the Bulletin of the Atomic Scientists and the University of Chicago have created an online tool that will help countries understand the true cost of choosing the reprocessing route—and perhaps also help limit the spread of nuclear reprocessing. The Nuclear Fuel Cycle Cost Calculator estimates the full cost of electricity produced by three configurations of the nuclear fuel cycle. This calculator is the first generally accessible model to provide a nuanced look at the economic costs of nuclear power, particularly in regard to the reprocessing of spent nuclear fuel. Among many other things, the calculator clearly demonstrates that in most cases, reprocessing results in electricity that is considerably more expensive than other nuclear power, when all costs are added in.

The Nuclear Fuel Cycle Cost Calculator estimates the price of electric power produced in:

- The once-through fuel cycle used in most US nuclear power plants, in which uranium fuel is used once and then stored for later disposal.
- A limited-recycle mode in which a mix of uranium and plutonium (that is, mixed oxide, or MOX) is used to fuel a light water reactor.
- A full-recycle system, which uses a fast neutron spectrum reactor that can be configured to “breed” plutonium that can subsequently be used as either nuclear fuel or weapons material.

The calculator lets users test how sensitive the price of electricity is to a full range of components—more than 60 parameters that can be adjusted for the three configurations of the nuclear fuel cycle considered by this tool. Users can select the fuel cycle they would like to examine, change cost estimates for each component of that cycle, and even choose uncertainty ranges for the cost of particular components. This approach allows users around the world to compare the cost of different nuclear power approaches in a sophisticated way, while taking account of prices relevant to their own countries or regions.

Despite the economic and proliferation arguments against the reprocessing of spent nuclear fuel, many nuclear-capable countries continue to engage in the practice, creating stocks of separated plutonium and uranium that can be used to fuel nuclear power plants—or, in the case of plutonium, to build nuclear bombs. (Plutonium emits relatively little ionizing radiation and is smaller in volume than spent fuel, making it an attractive theft target, compared to other sources of fissile material.)

Over the past 30 years, the United States has tried to persuade other countries—France, Russia, United Kingdom, India, and Japan, most notably—to stop their reprocessing operations, but without success. US arguments have focused on the dangers of nuclear weapons proliferation as a major reason for countries to suspend or resist reprocessing. These arguments often fall on deaf ears in other countries, because the United States has contributed substantially over the past 60 years to the development and proliferation of nuclear technologies and weapons based on highly enriched uranium and plutonium. United States officials and even independent US scientists who argue for reduced proliferation are often unconvincing to countries more recently involved in the nuclear power project.

If proliferation concerns do not persuade other countries to eschew reprocessing, however, those countries may respond to factual data about the financial burden of reprocessing, in comparison to once-through use and storage of nuclear fuel.

Differences in construction, fuel, borrowing, and operation and maintenance pricing make the actual costs of different fuel cycles in each country very difficult to calculate for policy makers who are not also nuclear scientists. Often, the overall cost of a particular approach to nuclear power generation can be nearly impossible to evaluate, because vendors of nuclear technology consider some of the information required for such an evaluation to be proprietary. Furthermore, pricing and cost calculations may change dramatically over time in the dynamic global nuclear power industry. It can be challenging even for well-meaning governments to project and discuss the costs of nuclear power in a transparent and meaningful way. The Nuclear Fuel Cycle Cost Calculator addresses this problem.

The Nuclear Fuel Cycle Cost Calculator is based on an economic model developed by University of Chicago professor (and Bulletin Science and Security Board member) Robert Rosner, with assistance from former colleagues at Argonne National Laboratory. Rosner partnered with two University of Chicago research assistants, Sam Olofin and Jeremy Klavans, to translate his initial model, optimizing its computer code so it could instantaneously display results over the Web. Experts from Princeton University's Program on Science and Global Security provided feedback on these efforts, and Bulletin staff helped Rosner's team work through several different iterations

of the cost calculator, aiming to make it accessible and valuable to nuclear power experts, to governmental leaders, to advocates involved in nuclear power decisions, and to ordinary citizens. The project was supported by significant funding from the MacArthur Foundation.

In coming weeks and months, nuclear power experts from around the world will be invited to give their assessments of the Nuclear Fuel Cycle Cost Calculator. Those comments will be published below this introduction and will inform the Bulletin's efforts to improve this interactive tool over time.

Legacy Management Activities at Selected Closure Sites
DOE IG
May 29, 2015
[LINK](#)

In 2003, the Department of Energy (Department) established the Office of Legacy Management (Legacy Management) to better manage its long-term responsibilities following the completion of environmental remediation activities. For fiscal year (FY) 2015, the Department budgeted about \$172 million for Legacy Management activities. Two of the Department's eight Comprehensive Environmental Response, Compensation, and Liability Act sites receive more significant assistance from Legacy Management: the former Feed Materials Production Center, now known as the Fernald Preserve (Fernald), near Cincinnati, Ohio, and the Mound Site (Mound), in Miamisburg, Ohio.

Nothing came to our attention during our audit to indicate that Legacy Management had not adequately managed surveillance and maintenance activities at Fernald and Mound. However, we identified certain maintenance and public outreach-type activities where, in our judgment, there may be opportunities to achieve efficiencies while still fulfilling the Department's commitments at these sites. Legacy Management provides funding for the maintenance and monitoring activities for a series of artificially created ecosystems at Fernald, spending approximately \$1.1 million in FY 2014. In addition, Legacy Management funds the operation of a visitor center and related public affairs program at Fernald, and a museum and public affairs program at Mound, spending about \$1.2 million in FY 2014 on these activities. While we recognize the Department's responsibility for postclosure maintenance and making information available to surrounding communities, there may be opportunities to evaluate the level of support necessary to meet these commitments.

MOX raised nearly \$60,000 for Children's Place
The Aiken Standard
May 29, 2015

[LINK](#)

The contractor for the Savannah River Site's MOX project is best known for constructing a facility to help dispose of weapons-grade plutonium. But recently, the contractor showed it has other investments and interests in the Aiken community.

Over the past several weeks, employees, friends and family members of the CB&I AREVA MOX Services team raised \$57,300 for Children's Place, the largest donation amount ever raised by the company.

MOX Services raised the money through a series of events, including its well-known Celebrity Waiter Night. The event annually brings "celebrities" from across the Aiken area to wait tables in many local restaurants, such as Grumpy's Sports Pub and Travinia Italian Kitchen.

Other events include a barbecue lunch at the Savannah River Site and the MOX Children's Place golf tournament at Woodside Plantation Country Club. The MOX contractor has also participated in fundraisers such as bake sales, lunches and a silent auction.

MOX employees also generously donated "Wish List" items to Children's Place, including blankets, toiletries and art supplies.

"I am so proud of our employees and staff this year for their efforts to provide Children's Place with such a record-setting donation," said David Del Vecchio, president and project manager for the MOX project.

Del Vecchio served as a Celebrity Waiter Night host this year, and said the group's effort is "a testament to our people and their generosity that makes such a difference to this worthy cause year after year."

Children's Place is a child and family development center serving at-risk children in Aiken County. MOX has raised funds for the charity for the past eight years.